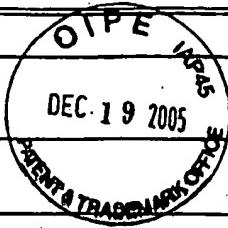


INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

ATTY DOCKET NO.
2004_0285SERIAL NO.
10/783,588U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: December 19, 2005

APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
February 23, 2004GROUP
263+ 2611

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	4,597,090	6-24-86	Forney, Jr.			
/DH/	AB	4,077,021	2-28-78	Csajka et al.			
/DH/	AC	2005/0084760	4-21-05	Wang et al.			
/DH/	AD	2005/0058633	3-17-05	Epstein et al.			
/DH/	AF	2005/0922922					
/DH/	AF	4,918,437	4-17-90	Jasinski et al.			
/DH/	AG	5,023,889	6-11-91	Divsalar et al.			
/DH/	AH	5,063,452	11-5-91	Higurashi			
/DH/	AI	5,124,852	6-23-92	Suwa et al.			
/DH/	AJ	5,136,380	8-4-92	Cho			
/DH/	AK	5,146,335	9-8-92	Kim et al.			
/DH/	AL	5,148,422	9-15-92	Sako et al.			
/DH/	AM	5,218,436	6-8-93	Sugiyama et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	NO
/DH/	AN	2627574	7-21-04	CN				
/DH/	AO	1529838	5-11-05	EP			abstract	
/DH/	AP	1499725	5-26-04	CN			only abstract	
/DH/	AQ	2004-159207	6-3-04	JP			corresponds to AP	
/DH/	AR	1528854	5-11-05	EP			only abstract	
/DH/	AS	52118	12-16-02	UA			only abstract	
/DH/	AT	1569334	1-26-05	CN				x

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

AU

EXAMINER

/Dac Ha/

DATE CONSIDERED

03/06/2007

FORM PTO 1449 (<i>modified</i>) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) <i>(Use several sheets if necessary)</i> Date Submitted to PTO: February 23, 2004				ATTY DOCKET NO. 2004_0285	SERIAL NO. NEW <i>10/783,588</i>		
				APPLICANT Mitsuaki OSHIMA et al.			
				FILING DATE February 23, 2004	GROUP <i>211</i>		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	5,311,550	5-10-94	Fouche et al.			
/DH/	AB	4,630,287	12-16-86	Armstrong			
/DH/	AC	4,271,527	6-2-81	Armstrong			
/DH/	AD	5,050,188	9-17-91	Dirr			
/DH/	AE	5,398,073	3-14-95	Wei			
/DH/	AF	5,452,015	9-19-95	Hulyalkar			
/DH/	AG	5,565,932	10-15-96	Citta et al.			
/DH/	AH	5,481,412	1-2-96	Bannai et al.			
/DH/	AI	3,909,721	9-30-75	Bussgang et al.			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
/DH/	AJ	0365431	4-25-90	EP			X
/DH/	AK	0485105	5-13-92	EP			X
/DH/	AL	92/14343	8-20-92	WO			X
/DH/	AM	89/08366	9-8-89	WO			X
/DH/	AN	0031193	7-1-81	EP			X
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
/DH/	AO	Shinji Matsumoto et al., "200 Mb/s 16 QAM Digital Radio-Relay System Operating in 4 and 5 GHz Bands", Japan Telecommunications Review, January 1982, vol. 24, no. 1, pages 65-73.					
/DH/	AP	M. Pecot et al., "Compatible Coding of Television Images, Part 2. Compatible System", Signal Processing Image Communication, October 2, 1990, no. 3, pages 259-268.					
/DH/	AQ	Mitsuaki Oshima, "Constellation-Code Division Multiplex for Digital HDTV", IEEE, 1992, pages 1086-1092.					
EXAMINER		<i>/Dac Ha/</i>		DATE CONSIDERED		03/06/2007	

**EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.*

INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

ATTY DOCKET NO.
2004_0285SERIAL NO.
10/783,588U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: June 9, 2005

APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
February 23, 2004GROUP
263A 2611

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	3,824,548	7-16-74	Sullivan et al.	—	—	—
	AB	3,959,726	5-25-76	Hinoshita et al.	—	—	—
	AC	4,303,939	12-1-81	Stephens et al.	—	—	—
	AD	4,303,941	12-1-81	Marti et al.	—	—	—
	AE	4,309,726	1-5-82	Tanaka et al.	—	—	—
	AF	4,535,352	8-85	Haskell	—	—	—
	AG	4,564,858	1-14-86	Resch	—	—	—
	AH	4,581,639	4-8-86	Judge	—	—	—
	AI	4,769,819	9-6-88	Matsutani et al.	—	—	—
	AJ	4,794,447	12-27-88	Tsinberg	—	—	—
	AK	4,800,426	1-24-89	Glenn	—	—	—
	AL	4,817,192	3-28-89	Phillips et al.	—	—	—
	AM	5,007,088	4-9-91	Ooi et al.	—	—	—
	AN	5,029,003	7-91	Jonnalagadda	—	—	—
DH	AO	5,134,464	7-28-92	Basile et al.	—	—	—

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AP						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DH	AQ	Masafumi SAITO et al., "Bit Error Rate Characteristics of OFDM in Multipath Environment", 1991
DH	AR	Ryutaro OHMOTO et al., " $\pi/4$ -shift QPSK Subcarrier Transmission", 1991

EXAMINER

DATE CONSIDERED

09/26/05

INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (<i>modified</i>) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: June 9, 2005	ATTY DOCKET NO. 2004_0285	SERIAL NO. 10/783,588
	APPLICANT Mitsuaki OSHIMA et al.	
	FILING DATE February 23, 2004	GROUP 2634 2611

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,181,112	1-19-93	Citta et al.	—	—	—
	AB	5,377,051	12-27-94	Lane et al.	—	—	—
	AC	5,400,084	3-21-95	Scarpa	—	—	—
	AD	5,576,902	11-19-96	Lane et al.	—	—	—
	AE	5,218,622	6-8-93	Fazel et al.	—	—	—
	AF	5,561,468	10-1-96	Bryan et al.	—	—	—
	AG	5,598,220	1-97	Citta et al.	—	—	—
DH	AH	5,802,241	9-1-98	Oshima	—	—	—
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	3-48587	3-1-91	Japan	—	—	abstract
	AK						
	AL						
	AM						
	AN						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DH	AO	J. A. C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come", IEEE Communications Magazine, Vol. 28, May 1990, pages 5-8 and 11-14
DH	AP	B. Hiroasaki, "An Orthogonally Multiplexed QAM System Using the Discrete Fourier Transform", IEEE Transactions on Communications, Vol. Com-29, No. 7, July 1981, pages 982-989
DH	AQ	L. J. Cimini, Jr., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing", IEEE Transactions on Communications, Vol. Com-33, No. 7, July 1985, pages 665-675 and Annex

EXAMINER

DATE CONSIDERED

09/26/05

Sheet 1 of 1

FORM PTO 1449 (modified)

ATTY DOCKET NO.
2004_0285SERIAL NO.
10/783,588U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: July 21, 2004

APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
February 23, 2004GROUP
2634-2611

U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	2-154583	6-13-90	Japan	—	—	abstract
	AK						
	AL						
	AM						
	AN						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DH	AO	Shigeki MORIYAMA et al., "Delay Propagation Characteristics at VHF and UHF bands in Urban Area", 1991 Spring National Convention Record, The Institute of Electronics, Information and Communication Engineers, Part 2, p. 406, March 15, 1991
DH	AP	Yasuhiro ITO et al., "Adaptive Weighted Code Division Multiplexing (AW-CDM) Transmission System for Terrestrial Digital Television Broadcasting", ITE Technical Report Vol. 17, No. 13, pp 27-32, February 25, 1993
	AQ	

EXAMINER

DATE CONSIDERED

09/26/05

FORM PTO 1449 (<i>modified</i>) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: February 23, 2004			ATTY DOCKET NO. 2004_0285	SERIAL NO. NEW 10/783,588			
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE February 23, 2004	GROUP 2634 2611			
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,311,550	5-10-94	Fouche et al.	—	—	—
	AB	4,630,287	12-16-86	Armstrong	—	—	—
	AC	4,271,527	6-2-81	Armstrong	—	—	—
	AD	5,050,188	9-17-91	Dirr	—	—	—
	AE	5,398,073	3-14-95	Wei	—	—	—
	AF	5,452,015	9-19-95	Hulyalkar	—	—	—
	AG	5,565,932	10-15-96	Citta et al.	—	—	—
	AH	5,481,412	1-2-96	Bannai et al.	—	—	—
DH	AI	3,909,721	9-30-75	Bussgang et al.	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	0365431	4-25-90	EP	—	—	X
	AK	0485105	5-13-92	EP	—	—	X
	AL	92/14343	8-20-92	WO	—	—	X
	AM	89/08366	9-8-89	WO	—	—	X
DH	AN	0031193	7-1-81	EP	—	—	X
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
DH	AO	Shinji Matsumoto et al., "200 Mb/s 16 QAM Digital Radio-Relay System Operating in 4 and 5 GHz Bands", Japan Telecommunications Review, January 1982, vol. 24, no. 1, pages 65-73.					
DH	AP	M. Pecot et al., "Compatible Coding of Television Images, Part 2. Compatible System", Signal Processing Image Communication, October 2, 1990, no. 3, pages 259-268.					
DH	AQ	Mitsuaki Oshima, "Constellation-Code Division Multiplex for Digital HDTV", IEEE, 1992, pages 1086-1092.					
EXAMINER		<i>Douglas Lalla</i>		DATE CONSIDERED		09/26/05	

**EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.*

FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: February 23, 2004			ATTY DOCKET NO. 2004_0285	SERIAL NO. NEW 10/783,588			
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE February 23, 2004	GROUP <i>D24 2611</i>			
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>JH</i>	AA	4,227,152	10-7-80	Godard et al.	—	—	—
	AB	4,525,846	6-25-85	Bremer et al.	—	—	—
	AC	4,751,478	6-14-88	Yoshida	—	—	—
	AD	4,891,806	1-2-90	Farias et al.	—	—	—
	AE	4,903,125	2-20-90	Parker	—	—	—
	AF	4,937,844	6-26-90	Kao	—	—	—
	AG	5,164,963	11-17-92	Lawrence et al.	—	—	—
	AH	5,555,275	9-1996	Oshima	—	—	—
<i>JH</i>	AI	5,565,926	10-15-96	Bryan et al.	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
<i>JH</i>	AJ	0311188	4-12-89	EP	—	—	X
	AK	0329158	8-23-89	EP	—	—	X
	AL	64-5135	1-10-89	JP	—	—	X
	AM	63-28145	2-5-88	JP	—	—	X
<i>JH</i>	AN	62-133842	6-17-87	JP	—	—	X
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
<i>JH</i>	AO	Tricia Hill et al., "A Performance Study of NLA 64-State QAM", IEEE Transactions on Communications, vol. COM-31, June 1983, no. 6, pages 821-826.					
<i>JH</i>	AP	Hideki Ishio et al., "A Proposal of a Carrier Digital Transmission System Using Multi-Level APSK", pages 1-20.					
<i>JH</i>	AQ	Shanmugam, "Digital and Analog Communication Systems" 1979, p. 272.					
EXAMINER <i>Don Lollar</i>		DATE CONSIDERED <i>09/23/05</i>					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: February 23, 2004			ATTY DOCKET NO. 2004_0285		SERIAL NO. 10783,588		
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE February 23, 2004		GROUP 2074 2611		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,105,442	4-14-92	Wei	—	—	—
	AB	4,048,572	9-13-77	Dogliotti et al.	—	—	—
	AC	5,282,019	1-25-94	Basile et al.	—	—	—
	AD	5,311,547	5-10-94	Wei	—	—	—
	AE	5,267,021	11-30-93	Ramchandran et al.	—	—	—
	AF	5,038,219	8-6-91	Yamashita et al.	—	—	—
	AG	5,087,975	2-11-92	Citta et al.	—	—	—
	AH	5,086,340	2-4-92	Citta et al.	—	—	—
DH	AI	5,243,629	9-7-93	Wei	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	53-137657	12-1-78	JP	—	—	X
	AK	0282298	9-14-88	Europe	—	—	X
	AL	0392538	10-17-90	Europe	—	—	X
	AM	0490552	6-17-92	Europe	—	—	X
DH	AN	0506400	9-30-92	Europe	—	—	X
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
DH	AO	Khaled Fazel et al., Combined multilevel coding and multiresolution modulation, February 8, 1993, Pages 1081-1085					
DH	AP	P. Hoeher et al., Performance of an RCPC-Coded OFDM-based Digital Audio Broadcasting (DAB) System, IEEE Global Telecommunications Conference "Globecom '91", December 2-5, 1991, Vol. 1 of 3, Pages 2.1.1 - 2.1.7					
DH	AQ	K. M. Uz et al., Combined multiresolution source coding and modulation for digital broadcast of HDTV*, 1992, Pages 283-292					
EXAMINER		<i>D. Lella</i>		DATE CONSIDERED 09/26/05			

FORM PTO 1449 (<i>modified</i>) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			ATTY DOCKET NO. 2004_0285	SERIAL NO. NEW 10783,588			
Date Submitted to PTO: February 23, 2004			APPLICANT Mitsuaki OSHIMA et al.	FILING DATE February 23, 2004			
				GROUP 2634 2611			
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	5,142,353	8-25-92	Kageyama et al.	—	—	—
	AB	5,197,061	3-23-93	Halbert-Lassalle et al.	—	—	—
	AC	5,291,289	3-1-94	Hulyalkar et al.	—	—	—
	AD	5,166,924	11-24-92	Moose	—	—	—
	AE	4,940,954	7-10-90	Aubert et al.	—	—	—
	AF	5,128,758	7-7-92	Azadegan et al.	—	—	—
	AG	5,038,402	8-6-91	Robbins	—	—	—
DH	AH	5,638,112	6-10-97	Bestler et al.	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AI	0448492A1	9-25-91	Europe	—	—	X
	AJ	0485108A2	5-13-92	Europe	—	—	X
	AK	0525641A2	2-3-93	Europe	—	—	X
	AL	0540231A2	5-5-93	Europe	—	—	X
DH	AM	0531046A2	3-10-93	Europe	—	—	X
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
DH	AN	K. M. Uz et al., Multiresolution Source and Channel Coding for Digital Broadcast of HDTV, 1992, Pages 61-69.					
DH	AO	Nambi Seshadri et al., Multi-Level Block Coded Modulations with Unequal Error Protection for the Rayleigh Fading Channel, Vol. 4, No. 3, May-June 1993, Pages 325-334.					
DH	AP	William F. Schreiber, Spread-Spectrum Television Broadcasting, SMPTE Journal, August 1992, Pages 538-549.					
EXAMINER <i>D. L. L.</i>		DATE CONSIDERED 09/26/05					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (<i>modified</i>) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) <i>(Use several sheets if necessary)</i> Date Submitted to PTO: February 23, 2004				ATTY DOCKET NO. 2004_0285	SERIAL NO. NEW 10703,588		
				APPLICANT Mitsuaki OSHIMA et al.			
				FILING DATE February 23, 2004	GROUP <i>8694 261</i>		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>DH</i>	AA	5,063,445	11-5-91	Nishizawa et al.	—	—	—
	AB	5,819,000	10-6-98	Oshima	—	—	—
	AC	5,999,569	12-7-99	Oshima	—	—	—
<i>DH</i>	AD	5,892,879	4-6-99	Oshima	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
<i>DH</i>	AE	7-99522	4-11-95	Japan	—	—	abstract
	AF	7-79415	3-20-95	Japan	—	—	abstract
	AG	5-75568	3-26-93	Japan	—	—	abstract
	AH	86-07223	12-4-86	WO	—	—	X
	AI	2 187 611	9-9-87	Great Britain	—	—	X
	AJ	85/04541	10-10-85	WO	—	—	X
	AK	04-196822	7-16-92	Japan	—	—	abstract
	AL	2-166979	6-27-90	Japan	—	—	abstract
	AM	64-74836	3-20-89	Japan	—	—	abstract
<i>DH</i>	AN	53-108215	9-20-78	Japan	—	—	abstract
OTHER DOCUMENT(S) (<i>Including Author, Title, Date, Pertinent Pages, Etc.</i>)							
<i>DH</i>	AO	Martin Vetterli et al., Multiresolution Coding Techniques for Digital Television: A Review, Multidimensional Systems and Signal Processing, Volume 3, May 1992, Pages 161-187.					
<i>DH</i>	AP	Ezio Biglieri et al., Introduction to Trellis-Coded Modulation with Applications, April 6, 1992, Pages 173-207.					
<i>DH</i>	AQ	English Language Abstract of European Patent No. 93 30 7575					
EXAMINER <i>Dan Liller</i>		DATE CONSIDERED <i>09/08/05</i>					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (<i>modified</i>) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			ATTY DOCKET NO. 2004_0285		SERIAL NO. MEAL 10/783,588		
			APPLICANT Mitsuaki OSHIMA et al.		FILING DATE February 23, 2004		GROUP 2611
Date Submitted to PTO: February 23, 2004							
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	4,636,876	1-13-87	Schwartz	—	—	—
	AB	4,855,692	8-8-89	Kennard et al.	—	—	—
	AC	4,873,701	10-10-89	Tretter	—	—	—
	AD	4,958,360	9-18-90	Sari	—	—	—
	AE	5,115,453	5-19-92	Calderbank et al.	—	—	—
	AF	5,168,509	12-1-92	Nakamura et al.	—	—	—
	AG	6,049,651	4-11-00	Oshima	—	—	—
DH	AH	6,256,357	7-3-01	Oshima	—	—	—
	AI						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	0122805	10-24-84	EP	—	—	X
	AK	63-180280	7-25-88	JP	—	—	abstract
	AL	64-68144	3-14-89	Japan	—	—	abstract
	AM	5-218978	8-27-93	Japan	—	—	X
DH	AN	3-69295	3-25-91	Japan	—	—	X
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
DH	AO	Kazuhiko Nitadori, Synthesis of Multichannel Orthogonal VSB Signals by Quadrature Method, 1976 International Conference on Communications, June 14-16, 1976, Volume 1, Pages 3-25 - 3-29.					
DH	AP	Thomas M. Cover, Broadcast Channels, IEEE Transactions on Information Theory, January 1972, Pages 2-14					
DH	AQ	"Optimum Weighted PCM for Speech Signals", Sundberg, IEEE Transactions on Communications, Volume COM-26, No. 6, June 1978, Pages 872-881.					
EXAMINER		<i>D. L. Lull</i>		DATE CONSIDERED		09/26/05	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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APPLICANT Mitsuaki OSHIMA et al.				FILING DATE February 23, 2004	GROUP <u>1034 2611</u>		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<u>DH</u>	AA	5,170,413	12-8-92	Hess et al.	—	—	—
<u>DH</u>	AB	5,214,656	5-93	Chung et al.	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
<u>DH</u>	AC	57-39629	3-4-82	Japan	—	—	abstract
	AD	58-161547	9-26-83	Japan	—	—	abstract
	AE	63-180222	7-25-88	Japan	—	—	abstract
	AF	92/22162	12-10-92	WO	—	—	X
	AG	2-94814	4-5-90	Japan	—	—	abstract
	AH	61-70861	4-11-86	Japan	—	—	abstract
	AI	2-218279	8-30-90	Japan	—	—	abstract
	AJ	2,095,435	5-10-92	Canada	—	—	X
	AK	91/20137	12-26-91	WO	—	—	X
	AL	2-141049	5-30-90	Japan	—	—	X
	AM	2-195732	8-2-90	Japan	—	—	abstract
	AN	5-167633	7-2-93	Japan	—	—	abstract
	AO	2-260726	10-23-90	Japan	—	—	X
<u>DH</u>	AP	58-161427	9-26-83	Japan	—	—	abstract
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AQ						
	AR						
EXAMINER <u>D. L. L.</u>		DATE CONSIDERED <u>02/23/05</u>					

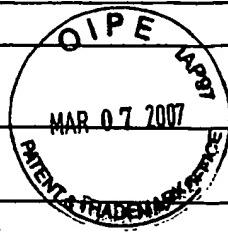
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Mitsuaki OSHIMA et al.FILING DATE
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/DH/	AA	5,210,770	5-11-93	Rice			
/DH/	AB	5,519,730	5-21-96	Jasper et al.			
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	AF						
	AG						
	AH						
	AI						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
/DH/	AJ	3-13145	1-22-91	Japan			abstract
/DH/	AK	4-322592	11-12-92	Japan			abstract
/DH/	AL	63-253738	10-20-88	Japan			abstract
/DH/	AM	62-502932	11-19-87	Japan			abstract
/DH/	AN	58-107740	6-27-83	Japan			abstract

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	AO	
	AP	
	AQ	

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03/19/2007

INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

ATTY DOCKET NO.
2004_0285SERIAL NO.
10/783,588U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: June 5, 2006

APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
February 23, 2004GROUP
203+ 2011

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/DH/	AA	4,267,592	5-12-81	Craiglow			
/DH/	AB	4,601,045	7-15-86	Lubarsky			
/DH/	AC	4,912,706	3-27-90	Eisenberg et al.			
/DH/	AD	4,914,655	4-3-90	Johannes et al.			
/DH/	AE	5,018,198	5-21-91	Takahashi			
/DH/	AF	4,003,002	1-11-77	Snijders et al.			
/DH/	AG	4,053,713	10-11-77	Nitadori			
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	AI						

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	AK						
	AL						
	AM						
	AN						

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	AO	
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	AQ	

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03/06/2007